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| APPLICATION NO. FILING DATE FI                  |   | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|---|---|-------------------------|---------------------|------------------|--|
| 10/709,428                                      | 05/05/2004                              | Cheng-Yen Huang         | FTCP0035USA         | 3427             |  |
| 27765 7   | 7590 07/28/2006                         |                         | EXAMINER            |                  |  |
| NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION |   |                         | TRINH, HOA B        |                  |  |
| P.O. BOX 506<br>MERRIFIELD, VA 22116            |   |                         | ART UNIT            | PAPER NUMBER     |  |
|   | , | 2814                    |                     |                  |  |
|   |   | DATE MAILED: 07/28/2006 |                     |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| •   |   | Application  | n No.  | Applicant(s)   |         |  |  |  |
|---|---|--|--|--|---------|--|--|--|
| Office Action Summary   |   | 10/709,428   | 3  | HUANG, CHENG-YEN   |         |  |  |  |
|   |   | Examiner   |  | Art Unit   |         |  |  |  |
|   |   | Vikki H. Tri   | nh   | 2814   |         |  |  |  |
| The MAILIN<br>Period for Reply  | IG DATE of this communication ap  | pears on the   | cover sheet with the c   | orrespondence ad   | ldress  |  |  |  |
| WHICHEVER IS L - Extensions of time may after SIX (6) MONTHS - If NO period for reply is - Failure to reply within the Any reply received by the  | CTATUTORY PERIOD FOR REPL<br>CONGER, FROM THE MAILING In<br>the available under the provisions of 37 CFR 1.<br>If from the mailing date of this communication.<br>It is specified above, the maximum statutory period<br>the set or extended period for reply will, by statut<br>the Office later than three months after the mailing ustment. See 37 CFR 1.704(b). | DATE OF THI<br>136(a). In no even<br>will apply and will<br>be, cause the applic | S COMMUNICATION t, however, may a reply be time expire SIX (6) MONTHS from eation to become ABANDONE | N.<br>nely filed<br>the mailing date of this c<br>D (35 U.S.C. § 133). |         |  |  |  |
| Status  |   |  |  |  |         |  |  |  |
| 1)⊠ Responsive  | to communication(s) filed on 27   | lune 2006  |  |  |         |  |  |  |
| · <u>—</u>  | This action is FINAL. 2b) This action is non-final.   |  |  |  |         |  |  |  |
| <u> </u>  |   |  |  |  |         |  |  |  |
|   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |  |  |  |         |  |  |  |
| Disposition of Claim  | •   | •  |  |  |         |  |  |  |
| 4)⊠ Claim(s) <i>11.</i>   | 4)⊠ Claim(s) <i>11,19,33 and 34</i> is/are pending in the application.  |  |  |  |         |  |  |  |
| ,   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |         |  |  |  |
|   | 5) ☐ Claim(s) is/are allowed.   |  |  |  |         |  |  |  |
|   | is/are allowed.<br>i)⊠ Claim(s) <u>11,19,33 and 34</u> is/are rejected.   |  |  |  |         |  |  |  |
|   | Claim(s) <u>F1, F9,33 and 34</u> is/are rejected.<br> Claim(s) is/are objected to.  |  |  |  |         |  |  |  |
|   | are subject to restriction and/   | or election re   | quirement.   |  |         |  |  |  |
| Application Papers  |   |  |  |  |         |  |  |  |
| _   | ation is objected to by the Evenin  |  |  |  |         |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |  |  |  |         |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |   |  |  |  |         |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |  |  |         |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |  |  |  |         |  |  |  |
| Priority under 35 U.S   |   |  | e the attached Office  | Action of format   | 10-132. |  |  |  |
| <u>-</u>  |   |  |  | 4.15   |         |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |  |  |         |  |  |  |
|   | on's Patent Drawing Review (PTO-948)<br>re Statement(s) (PTO-1449 or PTO/SB/08  | ~)   | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:                           | ate  | O-152)  |  |  |  |

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#### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/27/2006 has been entered.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

  (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 11, 19, and 33-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Sutardja et al. (6,903,448) (hereinafter Sutardja).

As to claim 11, Sutardja discloses a packaging comprising a package substrate 1 (figure 7) connected inherently to either a high voltage or a low voltage for turning the device on, a chip 2 (fig. 7) mounted on the package substrate and comprises a plurality of bonding option unit (col. 5, lines 47-48) that comprises a bonding pad (col. 5, lines 47-48); a plurality of first lead frame 72, 52 (fig. 7; the bonding pad has corresponding first

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lead frame 52, 72 (fig. 7); the first lead frame 52, 72 being connected to either a high voltage or a low voltage (note Vout), wherein the voltage level of the first lead frame 52, 72 is inherently logical opposite of the voltage level of the substrate; wherein the bonding pad (col. 5, lines 47-48) of each bonding option unit is connected to the package substrate 1 or the corresponding first lead frame 52, 72 for providing two types of bonding options for each bonding option unit (fig. 7).

As to claim 19, Sutardja discloses a method of packaging comprising the steps of providing a package substrate 1 (fig. 7) and connecting inherently to either a high voltage or a low voltage, mounting a chip 2 (fig. 7) on the package substrate 1 and comprising a plurality of bonding option unit (Col. 5, lines 47-48) that comprises a bonding pad; providing a plurality of first lead frame 52,72 (fig. 7); connecting the bonding pad to the substrate 1 or the corresponding first lead frame 52, 72 (fig. 7); the first lead frame 52, 72 (fig. 7) being connected inherently to either a high voltage or a low voltage (note Vout), wherein the voltage level of the first lead frame 52, 72 is inherently logical opposite of the voltage level of the substrate 1 (GND); wherein each bonding pad is selectively connected to the package substrate 1 or the first lead frame 52, 72 (fig. 7) for providing two types of bonding options for each bonding option unit (fig. 7).

As to claims 33 and 34, Sutardja further teaches the device and method of providing a plurality of second lead frames 51, 73 (fig. 7), each bonding pad (col. 5, lines 47-48; fig. 7) of the chip 2 (fig. 7) having a corresponding second lead frame 51, 73, wherein the second lead frames 51, 73 are used for inputting signals to the corresponding bonding pad (fig. 7), and each bonding pad (fig. 7) is connected to the substrate 1, the

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corresponding first lead frame 52, 752 or the corresponding second lead frame 51, 73 (fig. 7) for providing three types of bonding options for each bonding option unit (fig. 7).

### Response to Arguments

3. Applicant's arguments with respect to claims 11, 19, and 33-34 have been considered but are most in view of the new ground(s) of rejection.

Regarding to applicants' argument with respect to the present invention having a bonding pad 48 with three different types of options, the description and explanation of figures A and B in the remarks do not match up with the original disclosure. First, the original disclosure states that the chip has different modes while applicants attempt to claim that the bonding pad has different modes. Furthermore, the examiner reviews the present invention's specification and finds that applicants only describe the bonding pad 48 as being around the substrate, first lead frame, or second lead frame (see paragraph [0022]) and not to the extend that the bonding pad 48 has the options of connecting to the substrate, the first lead frame, or second lead frame.

#### **Conclusion**

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 5. Lee et al. (6,927,483) discloses a packaging having a substrate, chip, bonding pad 156 with three different connection points (substrate, first lead, and second lead). See fig. 1A.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Vikki Trinh whose telephone number is (571) 272-1719. The Examiner can normally be reached from Monday-Friday, 9:00 AM - 5:30 PM Eastern Time. If

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attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Wael Fahmy, can be reached at (571) 272-1705. The office fax number is 703-872-9306.

Any request for information regarding to the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Also, status information for published applications may be obtained from either Private PAIR or Public Pair. In addition, status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. If you have questions pertaining to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Lastly, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions as of June 2004. Paper copies of foreign patents and non-patent literature will continue to be included with office actions. These cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at <a href="http://www.uspto.gov/ebc/index.html">http://www.uspto.gov/ebc/index.html</a> or 1-866-217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. patent or patent application publications will not be granted.

Vikki Trinh, Patent Examiner AU 2814

HOAI PHAM
PRIMARY EXAMINER

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